## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claims 1-38 (Cancelled)

- 39. (Currently amended) A method for integrated synthesis and analyte determination on a support, comprising the steps of:
  - (a) providing a support <del>body</del>;
- (b) passing a liquid with, present therein, receptors or building blocks for synthesizing polymeric receptors over a the support,
- (c) site- or/and time-specifically immobilizing the receptors or building blocks in each case on by photoactivating predetermined positions on the support, the synthesis and analyte determination being carried out in an integrated apparatus, with the synthesis or/and the analyte determination process being monitored and controlled in any number of positions on the support.
- (d) where appropriate, repeating steps (b) and (c) until the required receptors have been synthesized in each case on the predetermined positions on the support,
  - (e) bringing the support into contact with a sample containing analytes and
  - (f) determining the analytes via their binding to the receptors immobilized on the <u>said support.</u>

wherein an <u>said</u> integrated apparatus <u>comprising</u> <u>comprises</u> a programmable light source matrix, a <u>said</u> support <u>which is</u> arranged between <u>said</u> light source matrix and <u>said</u> detector matrix, and means for supplying fluids into <u>the said</u> support and for discharging fluids from <u>the said</u> support is <u>used</u>.